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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,309

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Joon-Hoo Choi

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MACPHERSON KWOK CHEN & HEID LLP

2033 GATEWAY PLACE

SUITE 400

SAN JOSE, CA 95110

EXAMINER

SALERNO, SARAH KATE

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,309	Applicant(s) CHOI ET AL.	
	Examiner SARAH K. SALERNO	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/30/08 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6, 10 & 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (US PGPub 2001/0026125of record) in view of Hwang et al. (US PGPub 2002/0158995 of record) and Kobayashi et al. (US Patent 5,847,792).

Claim1: Yamazaki teaches an organic EL display panel comprising (FIG. 6): an insulating substrate (11); a polysilicon layer formed on the substrate (13-17, 31-32 & 34); a gate insulating layer (18) formed on the polysilicon layer (13-17, 31-32 & 34); a gate wire (611) formed on the gate insulating layer (18); an interlayer insulating film (20) formed on the gate wire; a data wire formed on the interlayer insulating film (20); an

organic EL layer (43) formed on the pixel electrode (40) and disposed in a predetermined area; a partition (41a) formed on the data wire and the pixel electrode and defining the predetermined area; and a common electrode (44) formed on the organic EL layer (43) and the partition (41a).

Yamazaki does not teach a pixel electrode formed on the same layer as the data wire. Hwang teaches a pixel electrode formed on the same layer as the data wire to reduce processing steps [0022, 0026]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device taught by Yamazaki to teach the a pixel electrode formed on the same layer as the data wire to reduce processing steps as taught by Hwang [0022, 0026].

Yamazaki and Hwang do not teach the partition formed directly on both the data wire and the pixel electrode. Kobayashi teaches the partition (10) formed directly on both the data wire (6) and the pixel electrode (8) to improve device performance (FIG. 7A; Col. 7 lines 1-30, Col. 3 lines 30-40). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device taught by Yamazaki and Hwang to have the partition formed directly on both the data wire and the pixel electrode to improve device performance as taught by Kobayashi (FIG. 7A; Col. 7 lines 1-30, Col. 3 lines 30-40).

Claim 2: Hwang teaches the pixel electrode includes the same material as the data wire [0022, 0026].

Claims 3 & 10: Yamazaki teaches the polysilicon layer (13-17, 31-32 & 34) comprises first (601) and second transistor portions (602) including source regions (13,

36) and drain regions (14 & 32) and a storage electrode portion (51) connected to the second transistor portion (602), the gate wire comprises first (19a) and second (35) gate electrodes and a storage electrode (35) overlapping the first (601) and the second transistor (602) portions and the storage electrode portion (51), respectively, the data wire comprises first and second data lines, a first source electrode (21) connected to the first data line and the source region (13) of the first transistor portion (601), a first drain electrode (22) connected to the drain region (14) the first transistor portion (601) and the second gate electrode (35), and a second source electrode (36) connected to the second data line and the source region (31) of the second transistor portion (602), and the pixel electrode (40) is connected to the drain region (32) of the second transistor (602) (FIG. 6, 7A; [0078-0091]).

Claims 6 & 13: Yamazaki teaches an auxiliary electrode (41b) contacting the common electrode (44) (FIG. 6).

4. Claims 4 & 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (US PGPub 2001/0026125 of record) in view of Hwang et al. (US PGPub 2002/0158995 of record) and Kobayashi et al. (US Patent 5,847,792) as applied to claims 1 & 2 above, and further in view of Aoki et al. (US PGPub 2001/0022497).

Regarding claims 4 & 11, as described above, Yamazaki and Hwang substantially read on the invention as claimed, except Yamazaki and Hwang do not teach a buffer layer disposed between the organic EL layer and the common electrode. Aoki teaches a layer between the EL layer and the cathode to improve electron injection properties of the EL device [0098]. Therefore it would have been obvious to one of

ordinary skill in the art at the time the invention was made to have modified the device taught by Yamazaki and Hwang to contain a buffer layer between the EI layer and the cathode to improve electron injection properties of the EL device as taught by Aoki [0098].

5. Claims 5 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (US PGPub 2001/0026125 of record) in view of Hwang et al. (US PGPub 2002/0158995 of record) and Kobayashi et al. (US Patent 5,847,792) as applied to claims 1 & 2 above, and further in view of Yamazaki et al. (US Patent 6,013,930).

Regarding claims 5 & 12, as described above, Yamazaki, Hwang, and Kobayashi substantially read on the invention as claimed, and Yamazaki ('995) and Kobayashi teach the partitions being made of an acrylic resin film and black resin but not of black photoresist. Yamazaki ('930) teaches the use of a black photosensitive acrylic resin between pixel electrodes (Col. 25 lines 30-67) to produce a highly-reliable and highly reproducible device (col. 2 lines 23-30). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device taught by Yamazaki ('995) Hwang, and Kobayashi to make the acrylic resin a black photosensitive acrylic resin to produce a highly-reliable and highly reproducible device as taught by ('930) (col. 2 lines 23-30).

Response to Arguments

6. Applicant's arguments with respect to claims 1-6 and 10-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH K. SALERNO whose telephone number is (571)270-1266. The examiner can normally be reached on M-F 8:00-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah K Salerno/
Examiner, Art Unit 2814

/Theresa T. Doan/
Primary Examiner, Art Unit 2814